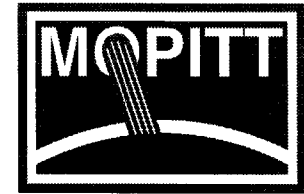
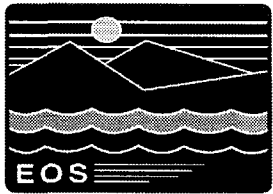


MOPITT

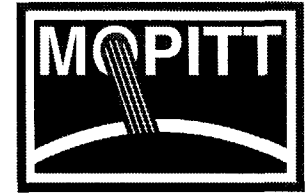


CURRENT EVENTS

- ◆ MOPITT instrument is presently at David Florida Laboratories (Ottawa)
 - ◆ EMC testing this week
 - ◆ Vibration testing next week
- ◆ Expected at University of Toronto calibration facility 15th April, 1997
- ◆ Contract discussions for MOPITT-A (aircraft version) are in progress
- ◆ Discussions on validation and response to NASA NRA also in progress
- ◆ MATR flights due Sept. 1997 on DOE Citation from Las Vegas
- ◆ Software development is “on track”

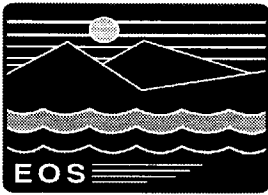


MOPITT



PROGRAM ISSUES

- ◆ Schedule
 - ◆ Test schedule is marginal for effective instrument calibration. Tests have been given 1,2,3 priorities to assist in identifying critical tests
 - ◆ Science return must be protected even under heavy schedule pressure
- ◆ Backup Plans
 - ◆ Backup plans have been submitted (see separate presentation).
 - ◆ Effort cannot be “turned on” instantaneously

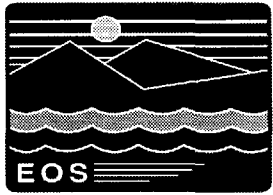


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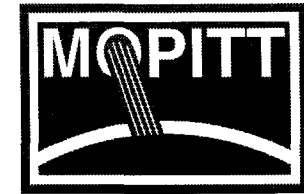


INSTRUMENT ISSUES

- ◆ The Instrument appears to be mostly OK!
- ◆ Scan motors have been a problem
 - ◆ Technically, issue has been solved
 - ◆ Risk level has increased, initiated analysis to see whether registration, etc can be realistically derived on-orbit
- ◆ Port cover motors also a problem
 - ◆ Technically, issue has been solved
 - ◆ Risk level increased, increased reluctance to re-close instrument doors (already very reluctant)
- ◆ Optical balance in modulators
 - ◆ Initial tests show similarity to engineering model, but no improvement.
 - ◆ Need to determine drift rate of imbalance and likely impact on data quality.

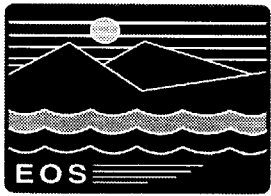


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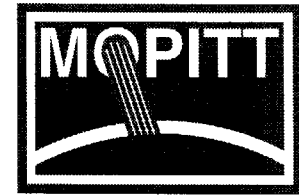


TESTING ISSUES

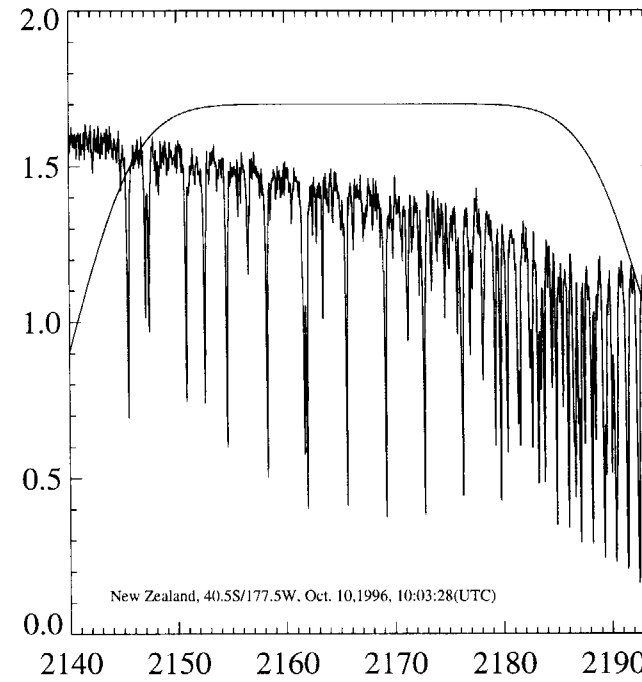
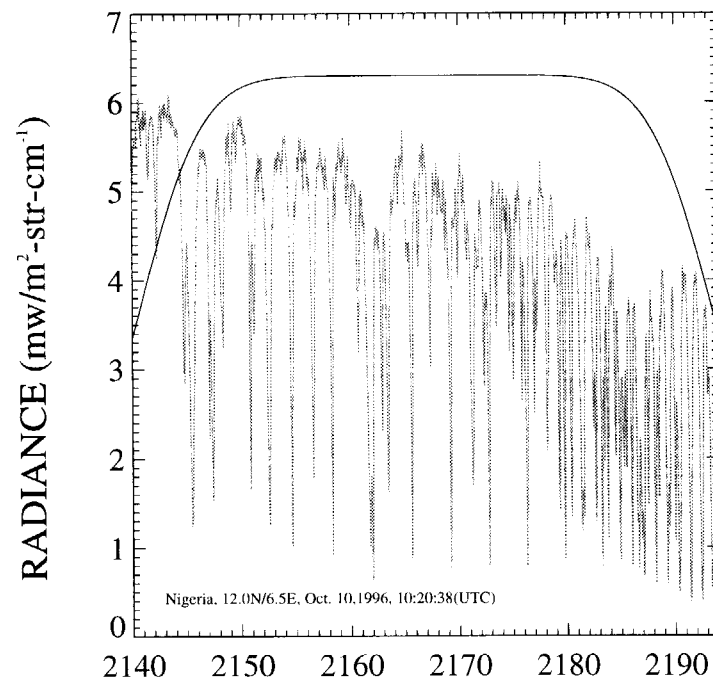
- ◆ Test Schedule is very tight - no margin for error or problems
- ◆ Test of (un)polarization proving very challenging, need to eliminate more artifacts from the test set-up to get reliable results
- ◆ Spectral test also challenging, success in getting some data at $4.7\mu\text{m}$, but more work needed for $2.4\mu\text{m}$ band.
- ◆ Attempting to speed up FOV tests which take longest time, but scan mirror problems focus attention on this area.



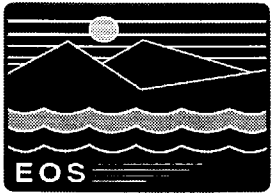
MOPITT



IMG High Resolution Spectra in MOPITT Thermal Band



WAVENUMBER(cm^{-1})



MOPITT



Polarisation Effects at MCS Output

